Project SMIBIO

*DEVELOPMENT OF **FLEXIBLE SMALL-SCALE INTEGRATED BIOREFINERIES** TO PRODUCE AN OPTIMAL RANGE OF BIOPRODUCTS FROM A VARIETY OF RURAL AGRICULTURAL AND AGRO-INDUSTRIAL RESIDUES/WASTES WITH A MINIMUM CONSUMPTION OF FOSSIL ENERGY*

Francisco Gírio

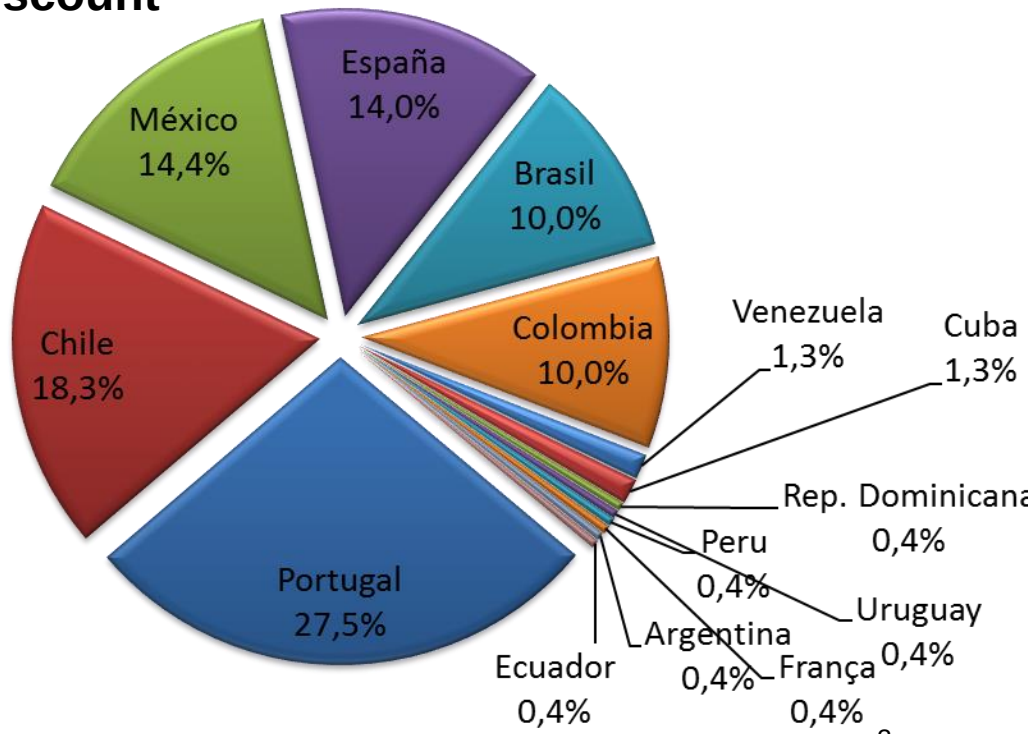
SMIBIO Coordinator
Head of Bioenergy Unit
LNEG, Portugal

SIADEB – Iberoamerican Society for Development of Biorefineries

PRE-FIRST ANNOUNCEMENT

The 4th CIAB- Congreso Iberoamericano de Biorefinerías will be Jaén, Spain in October 24-26, 2018

SIADEB Members have Registration Fees discount

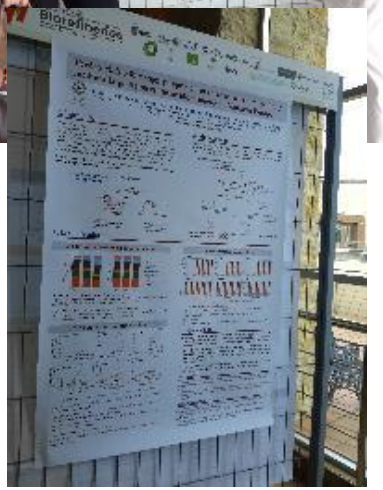


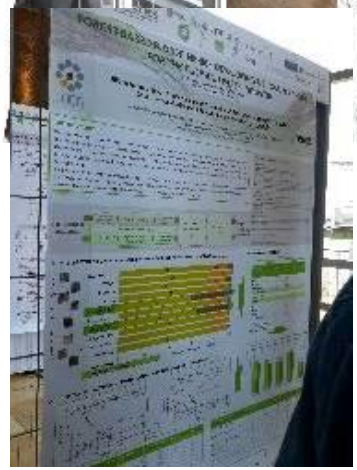
Current Number of Associates: 229

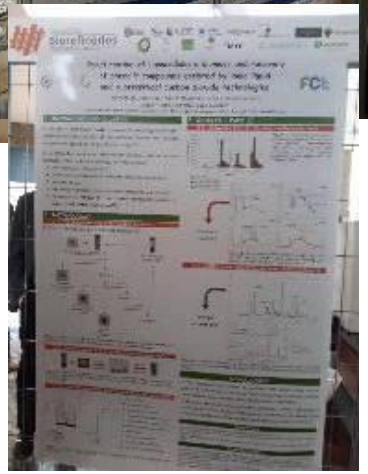
www.siadeb.org

Last 3-CIAB

23-24 November 2015, Concepción and Valparaiso, Chile







Consortium

UNAM

UNIVERSIDAD NACIONAL DE COLOMBIA

Colsnacks
Fritos y Precocidos de Colombia

PONTIFICIA UNIVERSIDAD CATOLICA DE VALPARAISO

INTA

WIP

Ciemat
Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas

C·A·D·O·V·A
Cooperativa Agrícola do Vale de Arraiolos, CRL

LNEG

STRADALUX systems

LNEG

WHY TO STUDY ONLY SMALL SCALE BIOREFINERIES?

They are the best solution for most rural areas in EU and LAC countries with limited feedstock supply chain…however there is a need to secure their techno-economical feasibility and sustainability

The SMIBIO project is implemented in the framework of ERANet-LAC, a Network of the European Union (EU), Latin America and the Caribbean Countries (CELAC) co-funded by the European Commission within the 7th Framework Programme for Research and technology Development (FP7).

Main Goals

The aim of SMIBIO is to study the **technical-economic and environmental viability of small scale integrated biorefinery units** capable of processing different kinds of biomass produced in short radius catchments of rural and small urban areas, both in Europe and in LAC countries.

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- How we do this? ……**Local Feedstocks/Wastes = Local Solutions!**

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- By modelling the best technological solutions **under proper and real conditions**, for different rural/urban regions (at least two in EU countries and two in LAC countries), **after considering optimal processing of local biomass in each selected region**.

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- How we do this? ……**Local Feedstocks/Wastes = Local Solutions!**
- By modelling the best technological solutions **under proper and real conditions**, for different rural/urban regions (at least two in EU countries and two in LAC countries), **after considering optimal processing of local biomass in each selected region**.
- The project is developing **appropriate tools and methods** to properly assess the technologies and optimize overall energy efficiency, environmental (LCA), economic (IRR, NPV and production costs), and social impacts (improvement in living conditions, job creation and new opportunities for rural development identification) **for any small-scale integrated biorefinery**.
- Sustainability impacts will be assessed and validated for the small-scale biorefineries.

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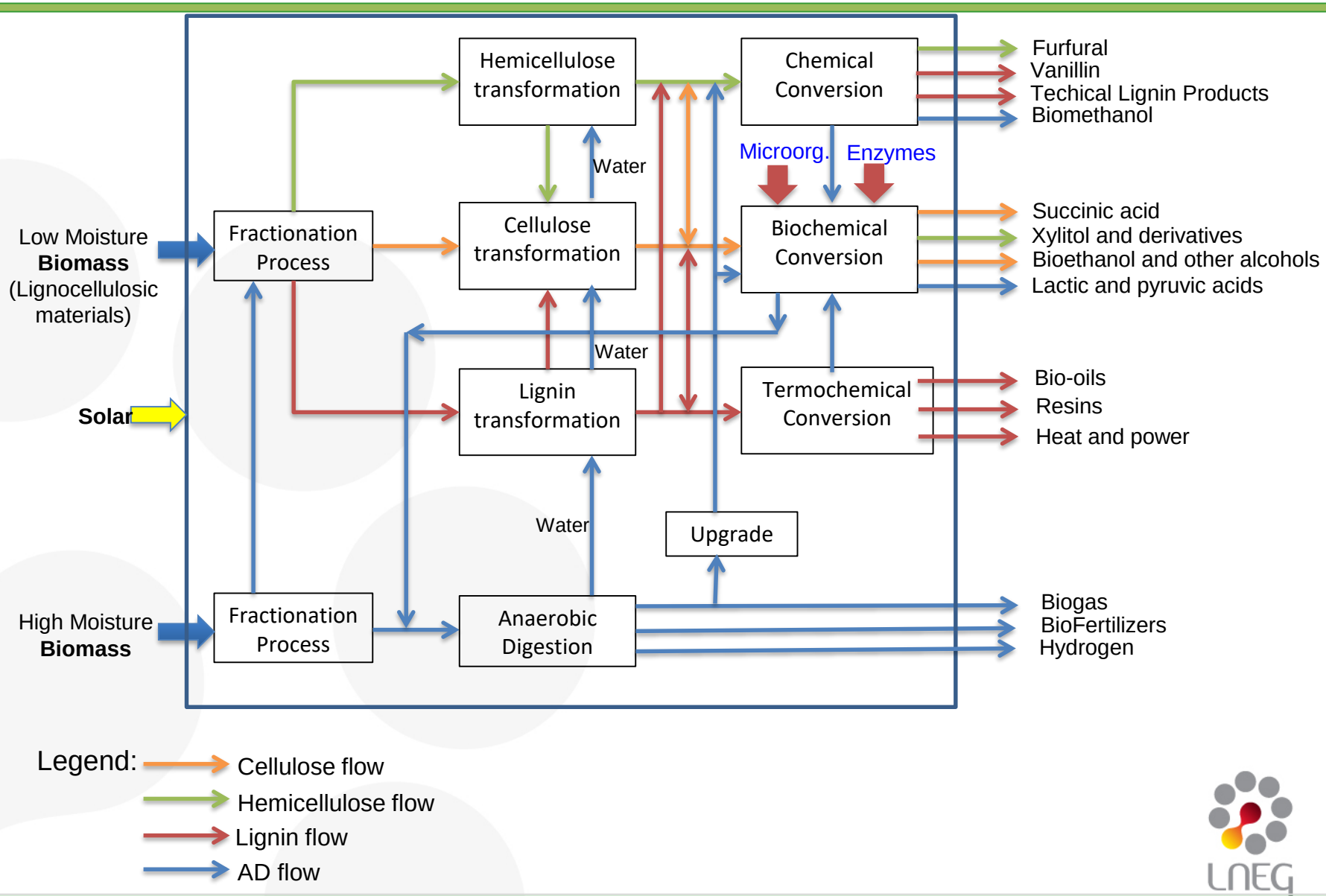
The Concept: two platform model



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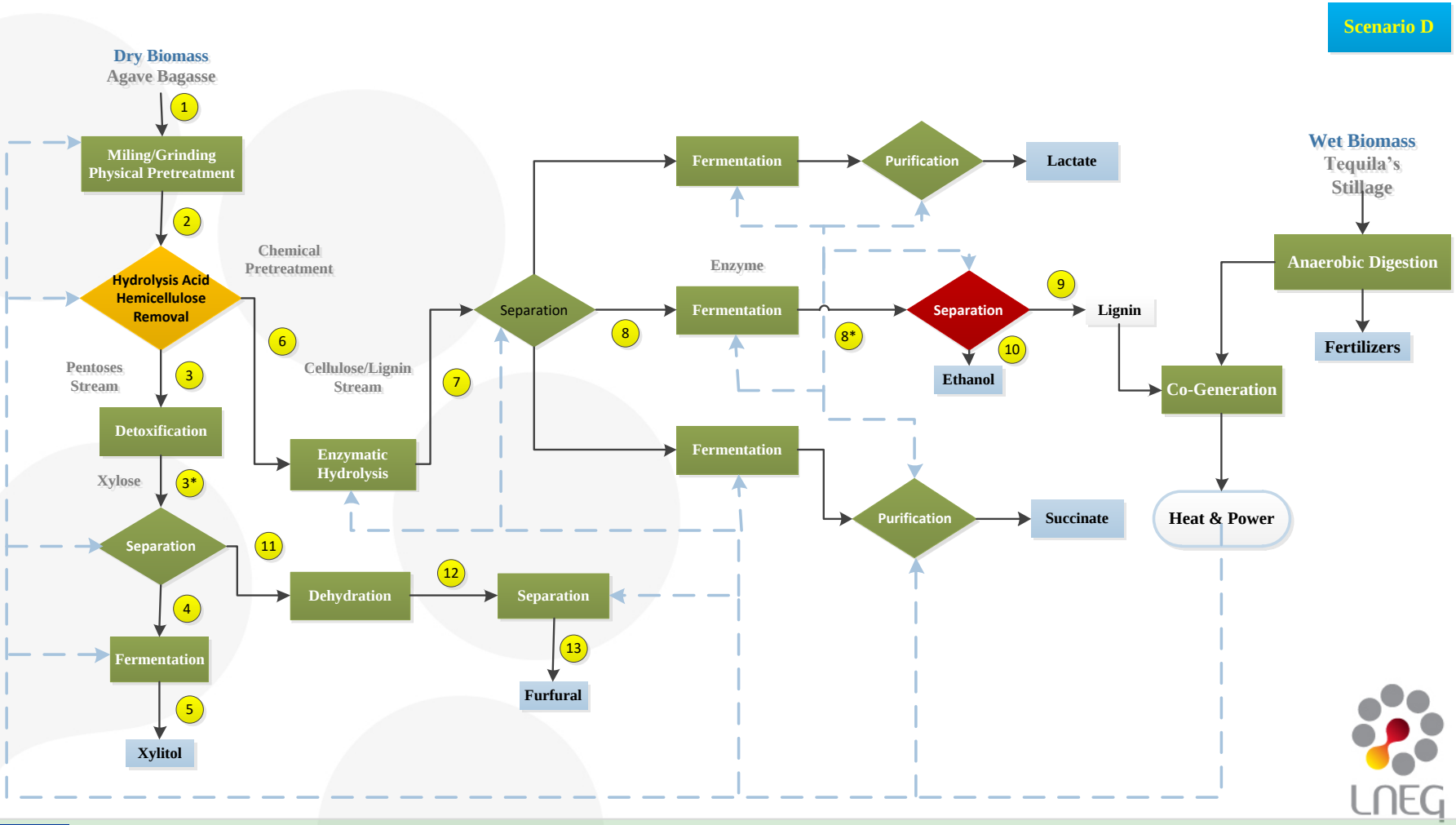
Some Examples of Case Studies

MX:



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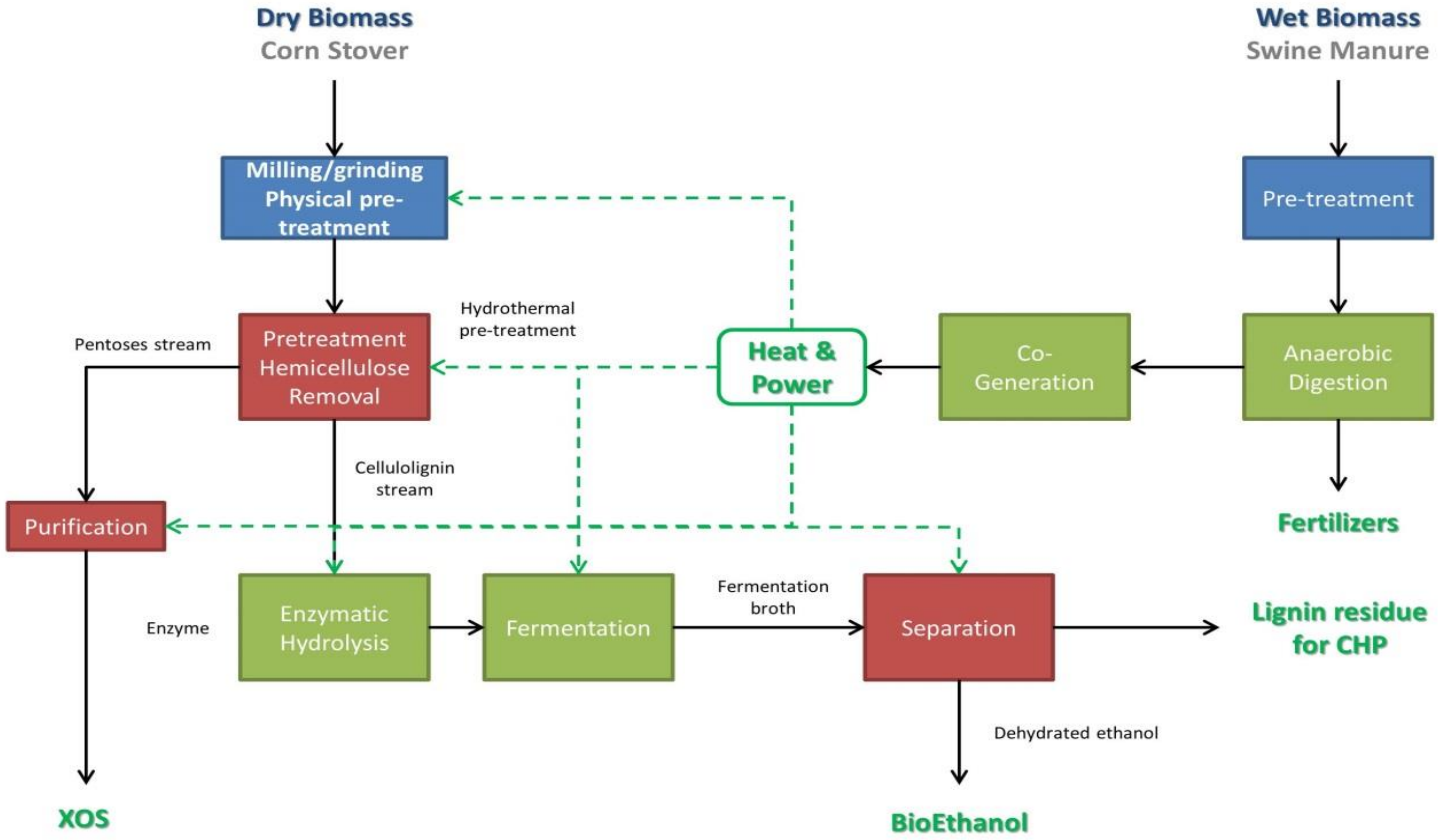
PT:



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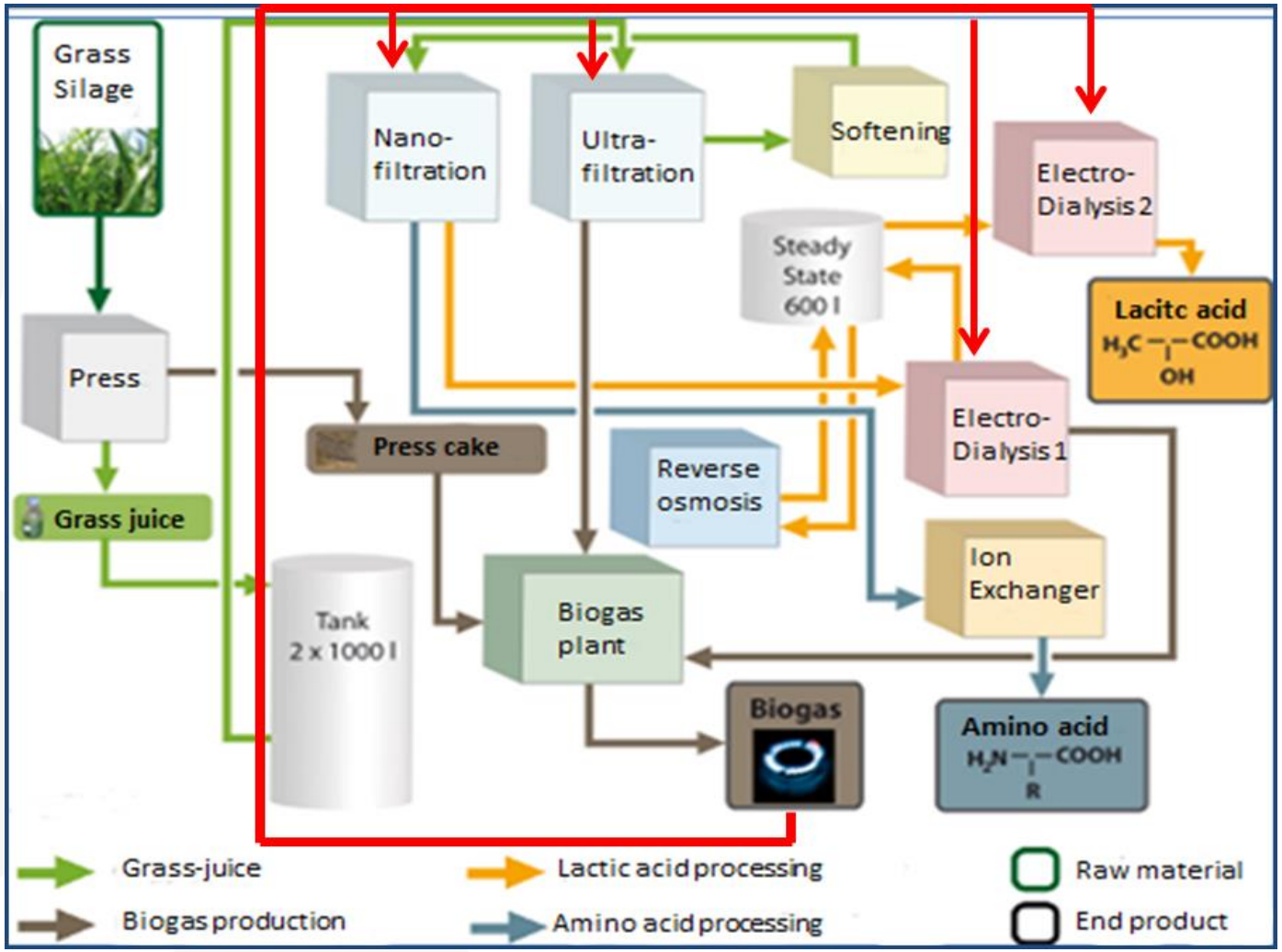
D:



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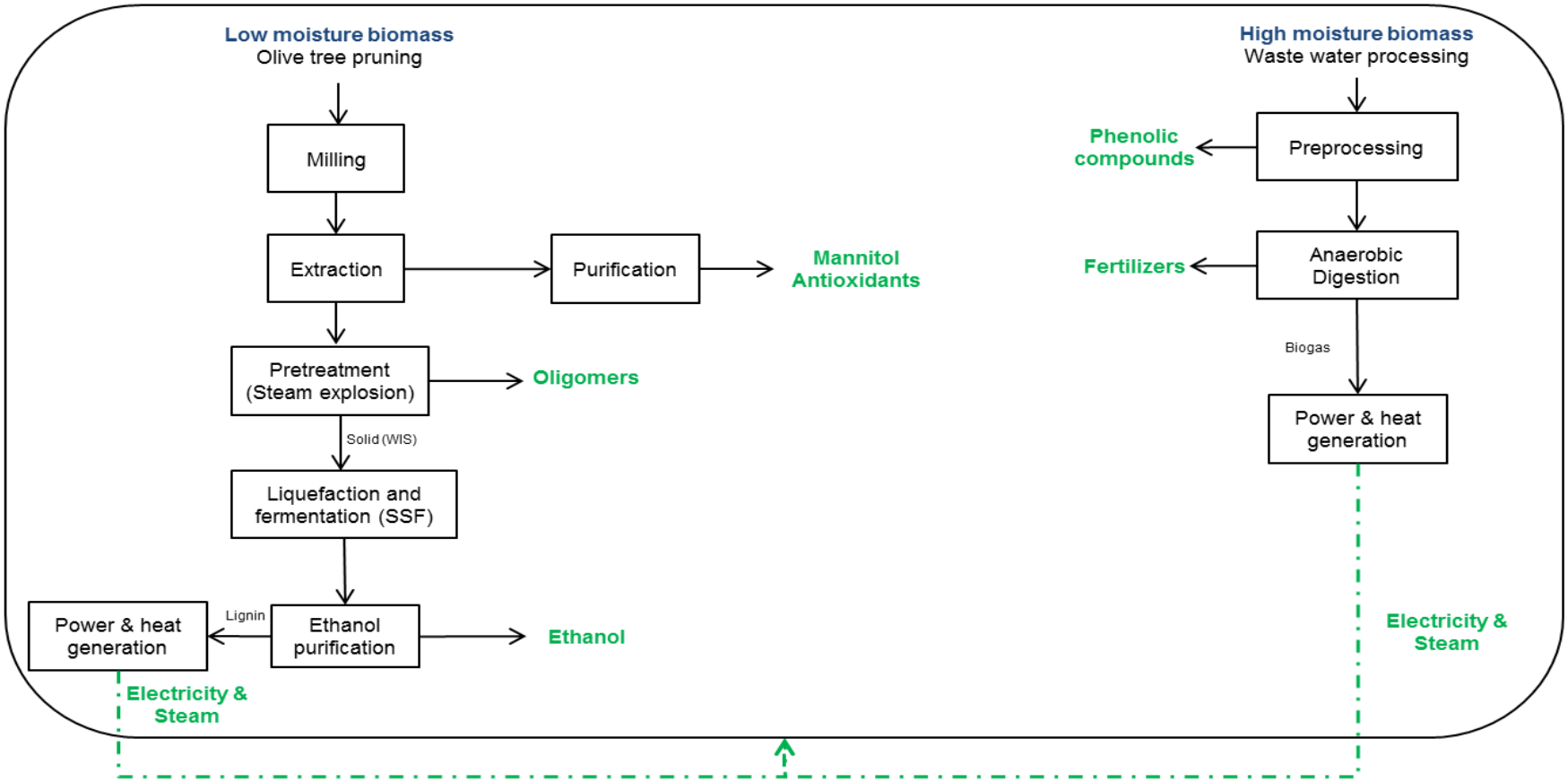
ES:



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Collaborative Achievements

- 3 International public Workshops (ARGENTINA, COLOMBIA & MEXICO) & 3 Advanced Courses on Biorefineries (CHILE, COLOMBIA & MEXICO) – Contribution from ALL SMIBIO Partners.

- Project website (www.smibio.net) on-line since M3. Full project information material available from ALL Partners at "Members Only"
  - This includes: Meeting Minutes, Workshops Minutes, Work Documents, Partner presentations, etc

- Project flyer launched during 4th meeting at Colombia (June 2017)

- Project logo (M3, 2016)

- Additionally, strong joint collaboration between all partners through:
  - Simulation WG team (monthy meetings)
  - Students' exchange mobility Program amongst SMIBIO partners
  - SMIBIO meetings – five general meetings did already occur (Chile, Portugal, Argentina, Colombia & México)

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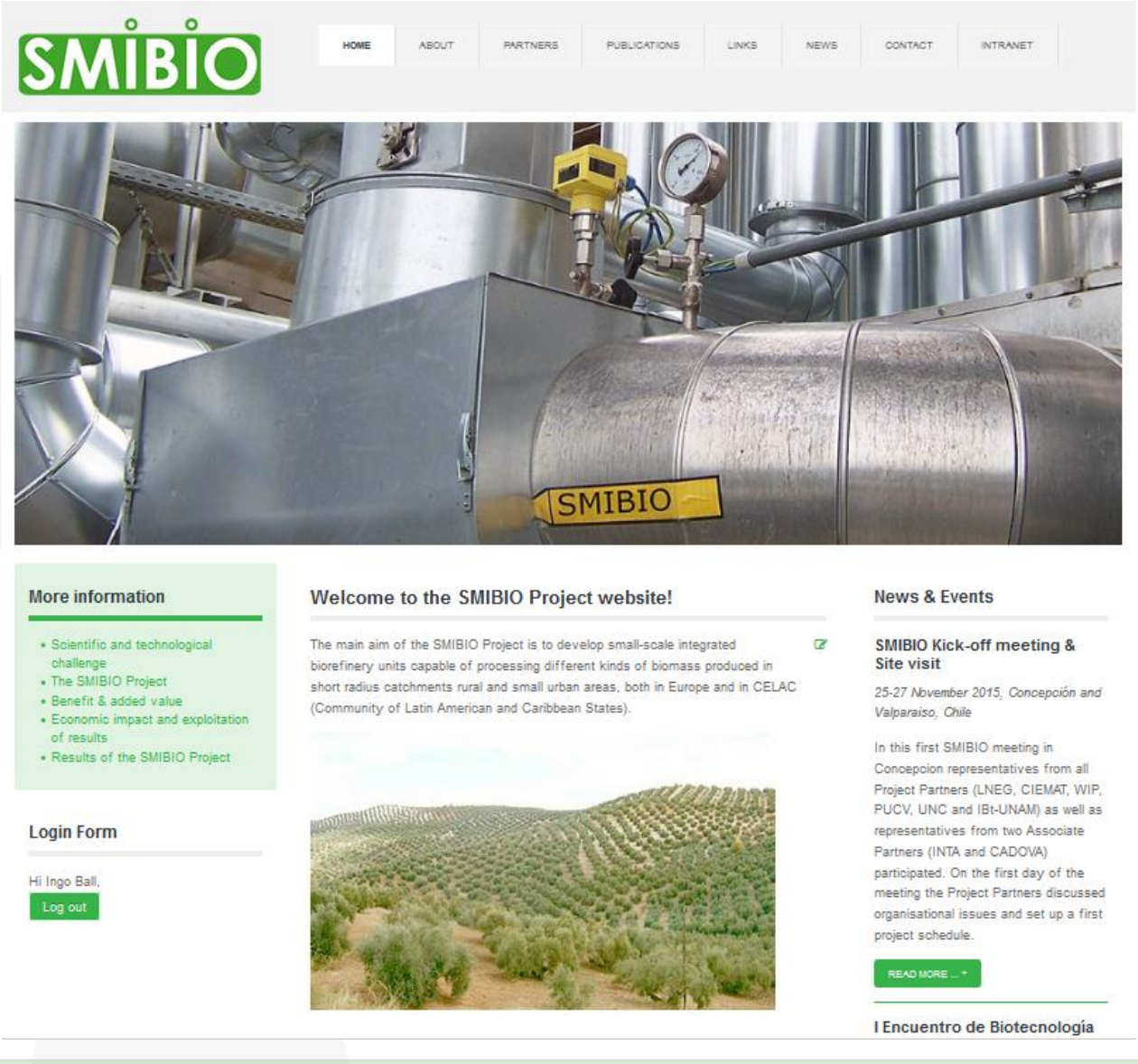
www.smibio.net – the project website

More Info:



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SMIBIO

ERANet LAC

LNEG
Laboratório Nacional de Energia e Geologia, I. P.

www.lneg.pt

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LNEG

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Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas

Pontificia Universidad Católica de Valparaiso

UNAM

WIP

Universidad Nacional de Colombia

INTA

Private Companies:

C·A·D·O·V·A
Cooperativa Agrícola do Vale de Arraiolos, CRL

STRADALUX systems

Colsnacks
Fritos y Precocidos de Colombia

Thanks/Gracias/Obrigado

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República Portuguesa
Economia